RESPONSE UNDER 37 CFR §1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 1631

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of
CAWSE et al.. Group Art Unit: 1631
Application No.: 09/595,005 Examiner: Channing S. Mahatan
Filed: June 16, 2000
For: HIGH THROUGHPUT SCREENING METHOD AND SYSTEM

FACSIMILE TRANSMITTAL COVER SHEET

To: PTO-centralized fax number
Examiner: Channing S. Mahatan
Group Art Unit: 1631
TC 1600

This transmission includes 37 pages (including cover sheet). When facsimile receipt is returned with this cover sheet, the USPTO acknowledges receiving the following documents: REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. §1.116 (33 pages) and MPEP 706.07(e) AND MPEP 706.07(d) REQUEST TO WITHDRAW FINAL REJECTION (3 pages)

Respectfully submitted,

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For: HIGH THROUGHPUT SCREENING METHOD AND SYSTEM

REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. §1.116

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Claims 1 to 12 and 16 to 21 are pending. An August 10, 2004 Final Rejection rejected claims 1 to 12 and 16 to 21 under 35 U.S.C. §112, first paragraph, 35 U.S.C. §112, second paragraph and 35 U.S.C. §103(a). Reconsideration is requested for the following reasons.

I. 35 U.S.C. 112, FIRST PARAGRAPH REJECTION

Claims 1 to 12 and 16 to 21 were rejected under 35 U.S.C. §112, first paragraph

The August 10, 2004 Final Rejection states that "Amendment of including "catalytic turnover number" *is* considered NEW *MATTER*," August 10, 2004 Final Rejection page 3. Further, the Final Rejection states:

> [The term "catalyst turnover number"] was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention

August 10, 2004 Final Rejection, page 2.

35 U.S.C. §112, first paragraph states that "the specification shall contain a written description of the invention, and of the manner and process of making and using it ... to enable *any person skilled in the art*... to make and use the same..." (emphasis added).

The term "catalyst turnover number" is well known to one skilled in the art as evidenced by the attached list of 335 patents using the term. Pearson et al. U.S. 6,284,919 is attached and is representative of the many U.S. and foreign patent publications that use and describe the term "catalyst turnover number." The term "catalyst turnover number" is well known to one skilled in the art as evidenced by the attached Hayashi et al. December 24, 1999 article and Mushima et al. 1994 article. These articles are representative of many Google uncovered references that use and define the term.

The terms "catalyst turnover number" and "turnover number" and the TON abbreviation are defined at the Specification page 14, lines 17 to 20 and are exemplified in 55 runs of Example 5 at specification page 15 and in the succeeding selection and by runs by the last paragraph on page 15 to line 8, page 16 and line 25, page 16 to page 17, line 2 of the specification.

The August 10, 2004 Final Rejection fails to indicate in what manner a term as well documented as known in the art and as extensively described and exemplified in the specification fails to meet the requirements of 35 U.S.C. §112, first paragraph. To this extent, the 35 U.S.C. §112, first paragraph rejection is improper examination and an improper final rejection.[1]

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1 The MPEP 2271 states:

> .... The grounds of rejection must (in the final rejection) be clearly developed to such an extent that the patent owner may readily judge the advisability of an appeal.....

Further, 37 C.F.R. § 1.104 entitled "Nature of Examination" provides that "[t]he examiner's action will be complete as to all matters...."

II. 35 U.S.C. 112, SECOND PARAGRAPH REJECTION

Claims 1 to 12 and 16 to 21 were rejected under 35 U.S.C. §112, second paragraph.

With respect to the specification definition of "catalyst turnover number," the Final Rejection states that:

> Since the language "catalytic turnover number;; appears to be stated in the alternative form (i.e. "or") it is unclear if Applicants intend such language "catalytic turnover number" to be defined as only "the number of moles of aromatic carbonate produced per mole of Palladium catalyst charged" or some other definition or calculation, wherein no further information is disclosed..

August 10, 2004 Final Rejection, page 4.

Applicant believes that the PTO is arguing that the alternative conjunction "or" makes the definition of catalyst turnover number unclear or that the definition of catalyst turnover number indicated at pages 14-15, lines 19 and 1-3 is restricted to "moles of aromatic carbonate produced per mole of Palladium catalyst charged" However, 35 U.S.C. §112, second paragraph only requires that the claims read in light of the specification apprise one "skilled in the art" of the scope of the invention. *Hybritech v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1387, 231 USPQ 81, 94, 95 (Fed. Cir. 1986), cert. denied 480 US 947 (1987). TON may have generic/species meanings depending on context. (Otherwise generic claims would be prohibited.) 35 U.S.C. §112, second paragraph does not prohibit the use of broad. The claims are definite to one skilled in the art. The rejection of claims 1 to 12 and 16 to 21 under 35 U.S.C. §112, second paragraph should be withdrawn.

III. *35* U.S.C. 103(a) REJECTION

Claims 1 to 12 and 16 to 21 were rejected under 35 U.S.C. §103(a) over Cong et al. and Brown et al. and claims 1 to 12 and 16 to 21 were rejected under 35 U.S.C. §103(a) over Nan et al. and Brown et al.

Applicant's May 24 Amendment pointed out that:

> .... the references have no *In re Lee* teaching that would have led one skilled in the art to combine the various Cong et al., Brown et al. and Nan et al. teachings. *See In re Lee*, 277 F.3d 1338, 61 USPQ 2d 1430, (Fed. Cir. 2002). Brown does not relate to discovery of catalysts. One skilled in the art would not have been led to "executing a genetic algorithm based on" a "catalyst turnover number" to combinatorially select a best catalyst system by a teaching that does not mention catalysis (Brown et al.). This is particularly so in the unpredictable field of catalytic chemistry. *See In re Marzocchi*, 439 F.2d 220, 223-24, 169 USPQ 367, 369-70 (CCPA 1971).

May 24 Amendment, page 9.

In response, the Final Rejection first acknowledges at page5 that "...Brown et al. does not specifically direct the described method of designing combinatorial library mixtures...." Then purportedly in response to *In re Lee* requirements, states:

> Brown et al. does disclose: 1) the application of the method to the optimization of any number of physical or other properties of the combinatorial library (catalytic property, catalytic turnover number, halide, etc; Abstract; and pages 2305-2308)...and 2) indicates the successful application of genetic algorithms to a wide range of problems in both chemical and non-chemical domains.

This characterization of the Brown et al. teaching is incorrect. Nowhere does Brown et al. mention "catalytic property, catalytic turnover number, halide etc." The reference in the Brown et al. abstract to "any property" has to do with "properties of the library." The library is an array of synthesized products. The meaning of "properties: is not that Brown et al. is applicable to discovering a catalyst; only that the Brown et al. process is applicable to improving any property of the product of the Brown et al. *synthesis*.

Further, Applicant has been unable to identify a teaching of Brown et al. that "indicates the successful application of genetic algorithms to a wide range of problems in both chemical and non-chemical domains." In accord with law and practice, the PTO is requested to identify the language in Brown et al. that purportedly teaches or suggests "the successful application of genetic algorithms to a wide range of problems in both

chemical and non-chemical domains," or withdraw the rejection. See 37 CFR 1.104 entitled "Nature of examination" and *In re Rijckaert*, 28 USPQ2d 1955, (Fed. Cir. 1993).[2].

The Final Rejection fails to address the question; why would one skilled in the art be led to combine the various Cong et al., Brown et al. and Nan et al. teachings? *See In re Lee*, 277 F.3d 1338, 61 USPQ 2d 1430, (Fed. Cir. 2002). Brown et al. does not relate to discovery of catalysts. One skilled in the art would not have been led to "executing a genetic algorithm based on" a "catalyst turnover number" to combinatorially select a best catalyst system by a teaching that does not mention catalysis (Brown et al.). this is particularly so in the unpredictable field of catalytic chemistry. *See In re Marzocchi*, 439 F.2d 220, 223-24, 169 USPQ 367, 369-70 (CCPA 1971).

Further, Applicant's May 24 Amendment pointed out that:

> ... even if improperly combined, the reference s do not teach or suggest "executing a genetic algorithm based on" a "catalyst turnover number." The references do not establish a prima facie case of obviousness. *See In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

May 24 Amendment, page 9.

The Final Rejection does not respond to this argument. The Final Rejection should be withdrawn and the claims allowed or another office action issued to addresses all Applicant's arguments,

For these reasons, the rejections of claims 1 to 12 and 16 to 21 under 35 U.S.C. §103(a) over Cong et al. and Brown et al. and claims 1 to 12 and 16 to 21 under 35 U.S.C. §103(a) over Nan et al. and Brown et al. should be withdrawn.

IV. PREMATURE FINAL REJECTION

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2 ." "[W]hen the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the reference...." *In re Rijckaert*, 28 USPQ2d *supra* at page 1957.

The Final Rejection (1) fails to indicate in what manner "catalyst turnover number" fails to meet the requirements of 35 U.S.C. §112, first paragraph and (2).fails to respond to Applicant's argument that even if improperly combined, the reference s do not teach or suggest "executing a genetic algorithm based on" a "catalyst turnover number." The references do not establish a prima facie case of obviousness. *See In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

MPEP 2271 states:

> In making the final rejection, all outstanding grounds of rejection of record should be carefully reviewed and any grounds or rejection relied on should be reiterated. The grounds of rejection must (in the final rejection) be clearly developed to such an extent that the patent owner may readily judge the advisability of an appeal.... [T]he final rejection... *should include a rebuttal of any arguments raised in the patent owner's response.* (Emphasis added.)

37 C.F.R. § 1.113 entitled "Final rejection or action" provides that " the examiner shall repeat or state all grounds of rejection then considered applicable to the claims in the application, *clearly stating the reasons in support thereof.* (Emphasis added.)

37 C.F.R. § 1.104 entitled "Nature of Examination" provides that "[t]he examiner's action will be complete as to all matters...."

Applicant requests the PTO to withdraw the present Office Action and to either allow the claims or issue a complete office action, restarting the period for response to address (1) the PTO failure to indicate in what manner "catalyst turnover number" fails to meet the requirements of 35 U.S.C. §112, first paragraph and (2).the PTO failure to respond to Applicant's argument that even if improperly combined, the reference s do not teach or suggest "executing a genetic algorithm based on" a "catalyst turnover number." The references do not establish a prima facie case of obviousness In this respect, Applicants include with this Amendment, an MPEP 706.07(c) AND MPEP 706.07(d) REQUEST TO WITHDRAW FINAL REJECTION addressed to the Supervisory Primary Examiner. This REQUEST is filed pursuant to MPEP 706.07(c) and MPEP

706.07(d) as prerequisite to a Petition to the Commissioner of Patents.

V. CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that claims 1 to 12 and 16 to 21 are allowable. Reconsideration and allowance are requested.

Should the Examiner believe that any further action is necessary in order to place this application in condition for allowance, he is requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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RESPONSE UNDER 37 CFR §1.116
EXPEDITED PROCEDURE
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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CAWSE et al. Group Art Unit: 1631

Application No.: 09/595,005 Examiner: Channing S. Mahatan

Filed: June 16, 2000

For: HIGH THROUGHPUT SCREENING METHOD AND SYSTEM

MPEP 706.07(c) AND MPEP 706.07(d) REQUEST TO WITHDRAW FINAL REJECTION

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P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Primary Examiner is requested to withdraw the July 9, 2004 Final Rejection for the following reasons:

1. Claims 1 to 12 and 16 to 21 are pending

2. An August 10, 2004 Final Rejection rejected claims 1 to 12 and 16 to 21 under 35 U.S.C. §112, first paragraph, 35 U.S.C. §112, second paragraph and 35 U.S.C. §103(a).

3. The August 10, 2004 Final Rejection (1) fails to indicate in what manner "catalyst turnover number" fails to meet the requirements of 35 U.S.C. §112, first paragraph and (2).fails to respond to Applicant's argument that even if improperly combined, the reference s do not teach or suggest "executing a genetic algorithm based on" a "catalyst turnover number." The references do not establish a prima facie case of obviousness.

4. The MPEP 2271 states:

> .... The grounds of rejection must (in the final rejection) be clearly developed to such an extent that the patent owner may readily judge the advisability of an appeal.....

5. Further, 37 C.F.R. § 1.104 entitled "Nature of Examination" provides that "[t]he examiner's action will be complete as to all matters...."

6. The August 10, 2004 Final Rejection is incomplete with respect to (1) and (2), above.

7. The August 10, 2004 Final Rejection is premature and should be withdrawn.

8. This Request to Withdraw the Final Rejection is filed pursuant to MPEP 706.07(c) and MPEP 706.07(d) as prerequisite to Petition to the Commissioner of Patents.

Applicants respectfully request the PTO to withdraw the July 9, 2004 Final Rejection, allow the application or reissue a non-final office action, restarting the period for response.

Respectfully submitted,

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